

#### **IV. AMENDMENTS TO THE CLAIMS**

1. (CURRENTLY AMENDED) A rotational speed controller for mixing equipment of a soil modifying machine for mixing and modifying soil to be modified, comprising:

a mixer rotating to mix soil to be modified;  
drive means for rotationally driving said mixer;  
speed control means for controlling rotational speed of said drive means based on an inputted rotational speed command value;  
working mode setting means for outputting a working mode signal for setting a desired grain diameter of modified soil in accordance with a kind of soil to be modified;  
and a controller for outputting the rotational speed command value corresponding to the working mode signal to said speed control means.

2. (ORIGINAL) The rotational speed controller for the mixing equipment of the soil modifying machine according to Claim 1,

wherein a plurality of said mixers are included; and  
wherein said controller controls rotational speeds of a plurality of said mixers according to the rotational speed command values corresponding to the individual working mode signals of a plurality of said mixers.

3. (CURRENTLY AMENDED) The rotational speed controller for the mixing equipment of the soil modifying machine ~~according to Claim 1, comprising:~~

a mixer to mix soil to be modified;  
drive means for rotationally driving said mixer;  
speed control means for controlling rotational speed of said drive  
means based on an inputted rotational speed command value;  
working mode setting means for outputting a working mode signal for  
setting a kind of soil to be modified; and  
a controller for outputting the rotational speed command value  
corresponding to the working mode signal to said speed control means,

wherein said working mode setting means comprises a plurality of selection switches for setting the kind of soil to be modified.

4. (CURRENTLY AMENDED) The rotational speed controller for the mixing equipment of the soil modifying machine according to Claim 2, comprising:

a mixer to mix soil to be modified;

drive means for rotationally driving said mixer;

speed control means for controlling rotational speed of said drive

means based on an inputted rotational speed command value;

working mode setting means for outputting a working mode signal for

setting a kind of soil to be modified; and

a controller for outputting the rotational speed command value

corresponding to the working mode signal to said speed control means,

wherein a plurality of said mixers are included,

wherein said controller controls rotational speeds of a plurality of said

mixers according to the rotational speed command values corresponding to the

individual working mode signals of a plurality of said mixers and

wherein said working mode setting means comprises a plurality of

selection switches for setting the kind of soil to be modified.

5. (ORIGINAL) The rotational speed controller for the mixing equipment of the soil modifying machine according to Claim 3,

wherein said controller has a rotational speed table in which the rotational speed command values of said mixer corresponding to a plurality of said selection switches are previously stored, and outputs the rotational speed command value, which is obtained from said rotational speed table correspondingly to any selected switch out of a plurality of said selection switches, to said speed control means.

6. (ORIGINAL) The rotational speed controller for the mixing equipment of the soil modifying machine according to Claim 4,

wherein said controller has a rotational speed table which the individual rotational speed command values of a plurality of said mixers corresponding to a plurality of said selection switches are previously stored, and outputs the rotational speed command values, which are obtained from said rotational speed table correspondingly to any selected switch out of a plurality of said selection switches, to said speed control means.

7. (ORIGINAL) The rotational speed controller for the mixing equipment of the soil modifying machine according to Claim 2,

wherein a plurality of said mixers comprise a rotary cutting mixer for mixing soil to be modified with a cutter for cutting it, and a rotary impact mixer for mixing soil to be modified by giving it an impact with a hammer.

8. (CANCELED).

9. (ORIGINAL) An engine speed controller for a soil modifying machine, comprising:

mixers for mixing soil to be modified and at least one of working machines for mixing around said mixers, which are provided at said soil modifying machine;

operation means for outputting operation signals to activate and deactivate said mixers and each of said working machines;

a pump having a plurality of hydraulic pumps for supplying pressure oil to each of a plurality of groups into which a plurality of hydraulic actuators driving said mixers and said working machines are divided, and driven by an engine;

governor control means for controlling engine speed based on an inputted command value; and

a controller for totaling hydraulic oil flow rates required by said hydraulic actuators operated based on said operation signals according to a plurality of said groups, computing a command value corresponding to the engine speed according to a maximum required flow rate out of said totaled values, and outputting it to the governor control means.

10. (CURRENTLY AMENDED) ~~The~~ An engine speed controller for the soil modifying machine according to Claim 8, further comprising: mixers for mixing soil to be modified and working machines other than said mixers, which are provided at said soil modifying machine; operation means for outputting operation signals to activate and deactivate at least said mixers of said soil modifying machine; an engine for supplying driving power for at least said mixers of said soil modifying machine; governor control means for controlling engine speed based on an inputted command value; and a controller for outputting command values based on said operation signals to said governor control means; and working mode setting means for outputting a working mode signal for setting a kind of soil to be modified, wherein said controller computes a command value to said governor control means according to said working mode signal and said operation signals.

11. (ORIGINAL) The engine speed controller for the soil modifying machine according to Claim 9, further comprising: working mode setting means for outputting a working mode signal for setting a kind of soil to be modified, wherein when totaling required hydraulic oil flow rates according to a plurality of said groups, said controller totals them based on said working mode signal and said operation signals.

12. (ORIGINAL) An engine speed controller for a soil modifying machine, comprising: mixers for mixing soil to be modified and at least one of working machines for mixing around said mixers, which are provided at said soil modifying machine; operation means for outputting operation signals to activate and deactivate said mixers and each of said working machines;

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a pump having a plurality of hydraulic pumps for supplying pressure oil to each of a plurality of groups into which a plurality of hydraulic actuators driving said mixers and said working machines are divided, and driven by an engine; working mode setting means for outputting a working mode signal for setting a kind soil to be modified; governor control means for controlling engine speed based on an inputted command value; and

a controller for previously storing an engine control curve expressing relationship between discharge flow rates of a plurality of said hydraulic pumps and engine speed,

wherein said controller totals pressure oil flow rates required by said hydraulic actuators corresponding to said working mode signal and said operation signals according to a plurality of said groups, obtains engine speed corresponding to a maximum required flow rate out of said totaled values from said engine control curve, and outputs a command value corresponding to said obtained engine speed to said governor control means.

13. (ORIGINAL) The engine speed controller for the soil modifying machine according to any one of Claim 10, Claim 11 and Claim 12,

wherein said working mode setting means has a plurality of selection switches corresponding to said working mode signals.

14. (NEW) A rotational speed controller for mixing equipment of a soil modifying machine for mixing and modifying soil to be modified, comprising:

a plurality of mixers including a first mixer and a second mixer rotating to mix soil to be modified;

drive means for rotationally driving said plurality of mixers;

speed control means for controlling rotational speed of said drive means based on an inputted rotational speed command value;

working mode setting means for outputting a working mode signal for setting a kind of soil to be modified; and

a controller for outputting the rotational speed command value corresponding to the working mode signal to said speed control means,

wherein said controller controls rotational speeds of said plurality of said mixers according to the rotational speed command values corresponding to the individual working mode signals of a plurality of said mixers and is operative to control rotational speed of the first mixer according to one of an operational speed state and a low speed state being lower in rotational speed than the operational speed state regardless of the outputted working mode signal.

15. (NEW) The rotational speed controller for the mixing equipment of the soil modifying machine according to Claim 14,

wherein the first mixer is a rotary cutting mixer for mixing soil to be modified with a cutter for cutting it, and the second mixer is a rotary impact mixer for mixing soil to be modified by giving it an impact with a hammer.